U.S. Application No.: 10/812,056

REMARKS

Applicants amend claims 1 and 17 and add new claims 20-23. Accordingly, claims 1-23 are all the claims pending in the application.

Claim rejections

Claims 1, 3, 4 and 10-19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Atsushi (JP Publication No.: 2002-221950; hereinafter "Atsushi" in view of Kitagawa et al. (U.S. Publication No.: 2002/0063784; hereinafter "Kitagawa").

Claim 2 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Atsushi and Kitagawa further in view of Lumelsky et al. (U.S. Patent No.: 5,196,924; hereinafter "Lumelsky").

Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Atsushi in view Kitagawa further in view of Pether et al. (U.S. Patent No.: 6,801,925; hereinafter, Pether).

Claims 7 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Atsushi and Kitagawa, in view of Lu et al. (U.S. Patent No.: 7,085,016; hereinafter "Lu").

Applicants traverse the rejection for at least the following reasons.

Claim 1

Without conceding to the merits of the Examiner's rejections in the previous office actions, by this Amendment, Applicants amend claim 1 to recite, *inter alia* "said bit rate converter summing a binary-1 to a least significant bit position of higher N bits of said M-bit input video signal; and selecting, as said N-bit output video signal, the summed higher N bits or

U.S. Application No.: 10/812,056

higher N bits of said M-bit input video signal depending on a total value of bits ranging from the (N+1)th significant position to the least significant position of said M-bit input video signal."

Atsushi and Kitagawa do not teach or suggest these feature of claim 1 recited above. For instance, Atsushi is directed to a display device using color reduction to store data in a small memory. Atsushi discloses a pseudo-gradation processing means 10 which receives the display data and performs a subtractive color by pseudo-gradation processing. The pseudo-gradation processing means 10 carries out the subtractive color on the R component to 4 bits, and G component to 5 bits and the B component to 3 bits. A frame memory 11 stores the subtractive color output from the pseudo-gradation processing means. Furthermore, Atsushi discloses a gradation amendment means 12 that converts 12 bit data of the frame memory 11 to an 18 bit data to be used by the driving means 13 (paragraph [0071]-[0082]). However, the pseudogradation processing means, the frame memory and the gradation amendment means do not teach or suggest "said bit rate converter summing a binary-1 to a least significant bit position of higher N bits of said M-bit input video signal" and "selecting, as said N-bit output video signal, the summed higher N bits or higher N bits of said M-bit input video signal depending on a total value of bits ranging from the (N+1)th significant position to the least significant position of said M-bit input video signal."

On the other hand, Kitagawa discloses a processing circuit capable of carrying out the correction at a signal level having a large gamma-correction-curve gradient with a high degree of precision without increasing the number bit output from a gamma correction LUT (paragraph [0008]). The processing circuit includes a gamma-correction unit for carrying out gamma

U.S. Application No.: 10/812,056

correction on input signal using a gamma correction table, wherein the number of bits input to the gamma correction unit is set at a value greater than the number of bits output from the

gamma correction unit. However, this processing circuit does not teach or suggest "said bit rate

converter summing a binary-1 to a least significant bit position of higher N bits of said M-bit

input video signal" and "selecting, as said N-bit output video signal, the summed higher N bits or

higher N bits of said M-bit input video signal depending on a total value of bits ranging from the

(N+1)th significant position to the least significant position of said M-bit input video signal."

In view of the above, Applicants submit that since both Atsushi and Kitagawa, alone or in combination, do not teach or suggest all the features of claim 1, claim 1 is allowable over the combination of references.

Claim 3, 4, 10-16, 18 and 19

Applicants submit that claims 3, 4, 10-16, 18 and 19 depend from claim 1, and therefore these claims are allowable at least by virtue of their dependency.

Claim 2

Applicants submit that since Lumelsky does not cure the deficiency noted above with regard to claim 1, and since claim 2 depends from claim 1, claim 2 is allowable at least by virtue of its dependency.

Claim 5

Applicants submit that since Pether does not cure the deficiency noted above with regard to claim 1, and since claim 5 depends from claim 1, claim 5 is allowable at least by virtue of its dependency.

12

U.S. Application No.: 10/812,056

Claims 7 and 8

Applicants submit that since Lu does not cure the deficiency noted above with regard to

claim 1, and since claims 7 and 8 depend from claim 1, claims 7 and 8 are allowable at least by

virtue of their dependency.

Claim 17

Claim 17 as amended recites "said bit rate converter summing a binary-1 to a least

significant bit position of higher N bits of said M-bit input video signal; and

selecting, as said N-bit output video signal, the summed higher N bits or higher N bits of

said M-bit input video signal depending on a total value of bits ranging from the (N+1)th

significant position to the least significant position of said M-bit input video signal", and

therefore is allowable for at least the same reasons claim 1 is allowable.

Claim 6

Claim 6 is allowable at least by virtue of its dependency on claim 1 and the additional

features recited therein.

New claims

Applicants respectfully submit that claims 20-23 depend from claims 1 or 17, and

therefore are allowable at least by virtue of their dependency and the additional features recited

therein.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed

to be in order, and such actions are hereby solicited. If any points remain in issue which the

13

U.S. Application No.: 10/812,056

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

/Ebenesar D. Thomas/

Registration No. 62,499

Ebenesar D. Thomas

SUGHRUE MION, PLLC Telephone: (202) 293-7060 Facsimile: (202) 293-7860

 $\begin{array}{c} \text{Washington office} \\ 23373 \\ \text{customer number} \end{array}$

Date: August 31, 2009